UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,789	04/14/2006	Tsutomu Kitoh	14321.79	2077
22913 WORKMAN N	7590 06/25/2007 IYDEGGER	EXAM	EXAMINER	
(F/K/A WORK	MAN NYDEGGER & SE	WONG, ERIC K		
60 EAST SOU'	TH TEMPLE SATE TOWER		ART UNIT	PAPER NUMBER
	SALT LAKE CITY, UT 84111		2883	
				
			MAIL DATE	DELIVERY MODE
•			06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
		10/540,789	KITOH ET AL.			
Office Action Summary		Examiner	Art Unit			
		Eric Wong	2883			
	The MAILING DATE of this communication app		orrespondence address			
Period fo	• •					
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in a sign of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>01 Mag</u>	a <u>y 2007</u> .				
2a)⊠	This action is FINAL . 2b) This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) <u>1 and 2</u> is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-2</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
9) 🗌 🤈	The specification is objected to by the Examine	т.				
10)	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority u	ınder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
	e of References Cited (PTO-892)	4) Interview Summary				
3) Inform	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Application/Control Number: 10/540,789 Page 2

Art Unit: 2883

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims rejected in the prior office action have been considered but are most in view of the new ground(s) of rejection. It is noted however that the Japanese reference disputed was supplied by Applicant.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application Publication 2002/0159703 to McGreer, and further in view of Applicants admitted prior art (figure 9B).

McGreer discloses a arrayed waveguide grating using input parabolic and output tapered slab waveguides having a "parabola" waveguide meeting the equation requirements as claimed (paragraph 21 and 75). However, McGreer fails to explicitly disclose a far-field upper limit of 0.217 and a low limit of 3.14 radians. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the range limits as disclosed for the most efficient operation of the AWG, since it has been held that where the general conditions of a claim are disclosed in the prior art (McGreers equations), discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

Application/Control Number: 10/540,789

Art Unit: 2883

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Page 3

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Wong whose telephone number is 571-272-2363. The examiner can normally be reached on Monday through Friday, 830AM - 430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/540,789 Page 4

Art Unit: 2883

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

//Eric Wong//

EW

Frank G. Font Supervisory Patent Examiner Technology Center 2800

Frank & Fort